

CLAIMS

1. A novel process for preparation of 10-oxo-10, 11-dihydro-5H-dibenz [b,f] azepine-5-carboxamide (oxcarbazepine) via intermediate 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl chloride, comprising the following steps:
 - a) Preparation of an intermediate 10-methoxy-5H-dibenz[b,f] azepine-5-carbonyl chloride, from 10-methoxyiminostilbene using bis (trichloromethyl) carbonate (BTC) triphosgene with organic base / organic solvent
 - b) Conversion of above intermediate to 10-methoxy-5H-dibenz[b,f] azepine-5-carboxamide using ammonia and with suitable solvent.
 - c) Formation of oxcarbazepine from step (b) using Lewis acid in an appropriate organic solvent at a suitable temperature between 25- 80°C. preferably at 50 to 70 °C,
 - d) Isolation using organic solvent,
2. A novel process as claimed in claim 1, wherein at step (a) organic base is slowly added to the solution for a period of 3-24 hrs, maintaining a temperature at 10°C, after completion of reaction, mixture is allowed to rise to room temperature, followed by separation of organic layer, and distilled to get crude intermediate, purified using organic solvent.
3. A novel process as claimed in claim 1 & 2, wherein the ammonia gas is purged till the reaction completion, distilled the solvent, added water, followed by cooling at room temperature to isolate intermediate,
4. A novel process as claimed in the above claims, wherein the solvent selected is from chlorinated aliphatic hydrocarbons/aromatic hydrocarbons or aprotic solvent in the preparation of carbonyl chloride,
5. A novel process as claimed in claim 4, wherein chlorinated aliphatic solvents are such as methylene dichloride, chloroform, ethylene dichloride, 1,1,1-trichloroethane, trichloroethylene etc.
6. A novel process as claimed in claim 4, wherein the solvent aromatic hydrocarbons are selected from toluene, xylene, chlorobenzene, etc.
7. A novel process as claimed in claim 4, wherein the aprotic solvents are selected from Dimethyl formamide, Dimethyl acetamide, N-methyl pyrrolidine and acetonitrile.

8. A novel process as claimed in claim 1 & 2 wherein the organic base is selected from aliphatic / aromatic tertiary amines.
9. A novel process as claimed in above claims, wherein the molar ratio of 10-methoxy iminostilbene to BTC is 1:0.34 - 0.5, and the molar ratio with base is 1:1-1.5.
10. A novel process as claimed in claim 9, wherein the solvent selected from acetone, methyl cellulose, methanol, ethanol, isopropyl alcohol, dimethylformamide etc.
11. A novel process as claimed in claim 1, wherein the Lewis acid is selected from p-toluene sulfonic acid, cationic resins etc.
12. A novel process for preparing 10-oxo-10,11-dihydro-5H-dibenz [b,f]azepine-5-carboxamide (oxcarbazepine) via intermediate 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl chloride substantially therein described with reference to foregoing examples.